DEFENSIBLE SPACE GUIDELINES 9044

(No. 7 September, 1991)

This term was first used in the foreword of the 1980 Fire Safe Guides for Residential Development in California and now provides the cornerstone of intent and description for the Board of Forestry's firesafe regulations and CDF's wildland fire protection planning program. **Defensible space is the area within the perimeter of a parcel, development, neighborhood, and community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fires.** The perimeter as used in this regulation is the area encompassing the parcel or parcels proposed for construction and/or development, excluding the physical structure itself. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, street names and building identification, and fuel modification measures. CDF shall assist and provide guidance to local jurisdictions, agencies, professionals, and the public in implementing these measures.

The future design and construction of structures, subdivisions, and developments in State Responsibility Area (SRA) shall provide for defensible space, providing built-in wildland fire protection as prescribed in conjunction with local jurisdictions and fire agencies.

MAINTENANCE OF DEFENSIBLE SPACE 9044.1

(No. 7 September, 1991)

The maintenance of defensible space requirements are essential to the success of CDF's wildland fire protection mission and should be secured as a condition of any permit or map approved by local government. To ensure continued maintenance of properties in conformance with any recommended standards and measures to assure continued availability, access, and utilization of the defensible space during a wildfire, all maintenance shall be secured as conditioned during the permit, parcel or map approval process. Maintenance timing, whether annual or more frequent, shall be considered during the conditioning phase. (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5)

ACCESS CONSIDERATIONS 9044.2

(No. 7 September, 1991)

Road and street networks, whether public or private, shall provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency. (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5) CDF recommends two separate points of ingress/egress to each development.

STREET SIGNS AND ADDRESS CONSIDERATIONS 9044.3

(No. 7 September, 1991)

Street signs and building addresses are necessary to facilitate the location of a fire and to avoid delays in response. All newly constructed or approved roads, streets, and buildings shall be designated by names or numbers, posted on signs clearly visible and legible from the roadway. (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5)

EMERGENCY WATER CONSIDERATIONS 9044.4

(No. 7 September, 1991)

Emergency water supplies are necessary to provide available and accessible emergency water for wildfire protection, in sufficient quantities and locations to attack a wildfire or defend property from a wildfire. Such emergency water may be provided in a fire agency mobile water tender, or naturally occurring or manmade containment structure, as long as the specified quantity is immediately available. (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5)

Water should be available on-site prior to the completion of road construction where a community water system is approved, or prior to the completion of building construction where an individual system is approved. (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5)

Water systems that meet or exceed the standards specified in Public Utilities Commission of California (PUC) revised General Order #103, Section VIII Fire Protection Standards and other applicable sections relating to fire protection water delivery systems, static water systems equaling or exceeding the National Fire Protection Association (NFPA) Standard 1231, "Standard on Water Supplies for Suburban and Rural Fire Fighting," or mobile water systems that meet the Insurance Services Office Rural Class 8 standard, shall be considered as meeting the requirements of wildland fire protection. (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5)

FUEL MODIFICATION CONSIDERATIONS 9044.5

(No. 7 September, 1991)

Fuel modification is necessary to reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation, and shall provide (1) increased safety for emergency fire equipment and evacuating civilians; (2) a point of attack or defense from a wildfire; and (3) strategic siting of fuel modification and greenbelts (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5). Efforts through CEQA review of projects and site specific mitigation at the permit and map review stage shall be made to secure perimeter and interior fuel modification zones, including building setback to apply PRC 4291, fuel modification zones along roads and the strategic siting of greenbelts.

ROOFING STANDARDS AND CONSIDERATIONS 9044.6

(No. 7 September, 1991)

Section 13108.5 of the Health and Safety Code requires the installation of, at minimum, Class C roofing assemblies on all structures built in SRA after October, 1988. Class B and A roof assemblies should be encouraged whenever possible.

CONSTRUCTION CONSIDERATIONS 9044.7

(No. 7 September, 1991)

Every new building or remodel of an existing structure should be constructed to at least meet the requirements specified in Volume 1 of the current edition of the Uniform Building Code (UBC) State of California Amendments as published by the International Conference of Building Officials (ICBO) for the group and type of occupancy intended. More stringent standards may be necessary as determined by the local jurisdiction.

Eaves, balconies, unenclosed roofs and floors and other similar surfaces should be protected on the exposed underside by materials approved for one-hour fire-resistant construction. All supporting members, vertical, horizontal and diagonal, used in stilt or cantilevered construction shall be built to one-hour fire-resistant construction as set forth in Chapter 43, UBC State of California Amendments, Volume 1.

All attic openings, soffit vents, foundation louvers or other ventilation openings in vertical exterior walls, eave overhangs, and vents through a roof should not exceed 144 square inches each and should be covered with one-quarter-inch mesh metal screen that is non-combustible and corrosion resistant.

Every chimney or vent attached to any solid or liquid fuel-burning device shall be provided with an approved, securely attached spark arrester consisting of (12-gauge recommended) welded or woven wire mesh screen with openings a maximum of one-half inch across (UBC, California Amendments, 3205[c]). It shall be maintained in effective working condition and shall be mounted in a vertical or near vertical position and visible from the ground (PRC 4291 [c] and [f]).

Exterior walls of buildings should be protected with materials of not less than one-hour fire-resistant construction on the exterior side (see table 43-B, UBC). The materials should extend from the top of the foundation to the underside of the roof sheathing.

The spaces between rafters, the wall plate line and the underside of the roof sheathing should be filled with not less than two-inch nominal thickness wood or equivalent solid blocking.

Windows, especially large vista windows, should be limited in number on the side of a building that faces high hazard fuels. Windows should be dual- or triple-glazed to resist breaking and radiant heat.

SITING, SPACING, AND DENSITY CONSIDERATIONS 9044.8

(No. 7 September, 1991)

Structure density, spacing, and siting should be based on the fire hazard severity classification and the on-site topography. As fuels and slopes increase, low density or planned unit developments should be considered. From a protection standpoint, it is easier to protect these two strategies of development.

Building should be set back at least 30' from the property line on parcels 1 acre and larger and buildings on a single property should be separated by at least 60'. Since close spacing is common in mobile home parks, those situated in wildland areas are particularly susceptible to destruction by wildfire. Spacings should conform to those standards already mentioned.

Building densities should be as follows: 15-30% slope, no more than three dwellings per acre; 31-50% slope, no more than one dwelling per 3-5 acres. Where slopes and fuels exhibit very high fire danger, local government should prohibit development or apply more stringent standards. In all cases, development of ridge tops, canyons or ridgeline saddles should be limited or mitigated with greater levels of built-in fire protection.

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